

REMARKS

The Examiner is thanked for the due consideration given the application. The specification has been amended to improve the language.

Claims 1, 2 and 6-23 are pending in the application. Claims 3-5 have been canceled and their subject matter has been incorporated into claims 1 and 15. Claims 1 and 15 have also been amended to better set forth the claimed invention. Claims 2 and 6-14 have been amended to improve the language in a non-narrowing fashion. Claims 16-23 are newly presented for consideration. Claims 16-23 generally correspond to claims 2 and 6-12.

No new matter is believed to be added to the application by this amendment.

Rejection Under 35 USC §112, Second Paragraph

Claims 1-15 have been rejected under 35 USC §112, second paragraph as being indefinite. These rejections are respectfully traversed.

The Official Action asserts that claims 1 and 15 lack clarity regarding the claimed components. However, claims 1 and 15 have been amended to clearly set forth three alternatives of the claimed composition (and associated method of treatment), either:

- a) anthocyanosides, procyanidins, and phloroglucinols;
- b) anthocyanosides, and phloroglucinols; **or**

c) procyanidins and phloroglucinols.

The Official Action asserts that misspellings render the claimed invention indefinite. However, the claims (and specification) have been amended to be free from misspellings. Also, the disclosure of the invention includes "Myrtucommulone", as evidenced by the attached Chemical Abstracts registry.

Claims 1-15 are thus clear, definite and have full antecedent basis. This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Rejections Under 35 USC §102(b)

Claim 1 has been rejected under 35 USC §102(b) as being anticipated by IMAOKA et al. (JP 406179609). Claims 1, 2 and 4 have been rejected under 35 USC §102(b) as being anticipated by NIEUWENHUIZEN et al. (U.S. Patent Application 2003/0064937). Claims 1-3 have been twice rejected under 35 USC §102(b) as being anticipated by GORENBEIN et al. (U.S. Patent 5,955,102). Claims 1, 5 and 6 have been rejected under 35 USC §102(b) as being anticipated by GHOSAL (U.S. Patent 6,224,906). These rejections are respectfully traversed.

Claims 3-5 have been canceled and their subject matter has generally been incorporated into claim 1. The aforesaid art rejections were each free of the subject matter of at least one of claims 3-5. As a result, amended claim 1 is not anticipated by the aforesaid art references. Claims depending upon claim 1 are patentable for at least the above reasons.

These rejections are believed to be overcome, and withdrawal thereof is respectfully requested.

Rejection Under 35 USC §103(a) Based On IMAOKA et al.

Claims 1-10 and 13-15 have been rejected under 35 USC §103(a) as being unpatentable over the combination of IMAOKA et al. (JP 406179609), BARNEY et al. (U.S. Patent 5,370,863), VAN DEN BERGHE (U.S. Patent 6,284,289) and ZOU (CN 1421240). This rejection is respectfully traversed.

The present invention pertains to compositions containing:

- a) anthocyanosides, procyanidins, and phloroglucinols;
- b) anthocyanosides, and phloroglucinols; **or**
- c) procyanidins and phloroglucinols.

As is set forth in independent claims 1 and 15 of the present invention: "the anthocyanosides are derived from *Vaccinium myrtillus* extract, the procyanidins are derived from a *Vitis vinifera* extract, a *Camellia sinensis* extract or from other edible plants containing them, and the phloroglucinols are derived from *Hypericum spp.*, *Myrtus spp.* or *Humulus lupulus* extracts."

None of the applied art, alone or in combination, suggests the compositions a), b) and c) of the present invention.

IMAOKA et al. disclose a composition for the oral cavity which contains a grape extract and 1,8-cineole. IMAOKA et

al. fail to teach or suggest replacing 1,8-cineole with other active ingredients.

Nonetheless, the Official Action refers to NIEUWENHUIZEN et al. (U.S. Application 2003/0064937) as evidence that grape extract contains procyanidins ("Vitis vinifera extract comprising 85 wt% procyanidins," paragraph 0077). The Official Action additionally refers to GROS (FR 2571257) as evidence that red grape skins contain anthocyanoside complex.

BARNEY et al. pertain to compositions for the prevention of plaque or periodontal diseases which contain hops acids. BARNEY et al. fail to teach or suggest the utilization of pure phloroglucinols from *Humulus* extracts. BARNEY et al. additionally fail to teach or suggest combining hops acids with other ingredients. Further, one skilled in the art, aware of BARNEY et al., would not have chosen colupolone, as it is less active than the other tested acids. BARNEY et al. thus teach away from the present invention.

VAN DEN BERGHE pertains to a composition for the treatment of labial herpes based on a quaternary ammonium compound and an antiviral agent. *Myrtus communis* and *Hypericum perforatum* are cited in a long list of plants used as additional ingredients of the composition. There is no hint whatsoever that would have led a skilled person to select these two specific ingredients and to combine them with procyanidins derived from a *Vitis vinifera* extract or a *Camillia sinensis* extract.

ZOU pertains to mint oil. Mint oil and derivatives thereof are not contained in the compositions of the present invention, and therefore a skilled person would not have considered this document as a relevant source of information. ZOU is thus non-analogous art.

Moreover, even if a skilled person had combined ZOU with any one of IMAOKA et al., BARNEY et al. and VAN DEN BERGHE, this skilled person would fail to produce the compositions of the present invention.

Also, the Official Action relied upon two additional references (NIEUWENHUIZEN et al. and GROS) as evidence of the compounds associated with grapes. As a result, a total of six references were used to allege *prima facie* unpatentability. Combining the six references could only be accomplished by utilizing impermissible hindsight reconstruction.

Therefore, one of ordinary skill would fail to produce claims 1 and 15 of the present invention from a knowledge of the teachings of IMAOKA et al., BARNEY et al., VAN DEN BERGHE and ZOU (in light of NIEUWENHUIZEN et al. and GROS). A *prima facie* case of unpatentability has thus not been made. Claims depending upon claim 1 or 15 are patentable for at least the above reasons.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Rejection Under 35 USC §103(a) Based On VAN DEN BERGHE

Claims 11 and 12 have been rejected under 35 USC §103(a) as being unpatentable over the combination of VAN DEN BERGHE and NAGUIB (U.S. Patent 6,623,768). This rejection is respectfully traversed.

The failings of VAN DEN BERGHE have been discussed above. At page 9, lines 1-2, the Official Action acknowledges: "Van Den Berghe does not teach extracting *Myrtus communis* with carbon dioxide, and a content of myrtocumolone in the extract." The Official Action then turns to NAGUIB.

However, NAGUIB is concerned with the preparation of a *Ferula* extract with a low solvent content and which allows a low dosage, without giving any specific teaching of *Vaccinium myrtillus*.

Rather, NAGUIB is aimed at solving a formulative problem regarding *Ferula hermonis*. Thus a skilled person would not have considered this document relevant for the preparation of compositions for the treatment of the oral cavity and would not have combined it with VAN DEN BERGHE. Moreover, even if a skilled person had combined these two documents, the skilled person would not have arrived at the present invention because, as explained above, VAN DEN BERGHE discloses *Myrtus communis* and *Hypericum perforatum* in a long list of additional components, without providing inference as to their selection as main ingredients for the preparation of oral compositions.

One of ordinary skill in the art would thus not produce claims 11 and 12 of the present invention from a knowledge of the teachings of VAN DEN BERGHE and NAGUIB. A *prima facie* case of obviousness has thus not been made.

This rejection is believed to be overcome and withdrawal thereof is respectfully requested.

Conclusion

The Examiner is thanked for considering the Information Disclosure Statement filed May 23, 2006 and for making an initialed PTO-1449 Form of record in the application.

Prior art of record but not utilized is believed to be non-pertinent to the instant claims.

The rejections are believed to have been overcome, obviated or rendered moot, and that no issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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APPENDIX:

The Appendix includes the following item:

- Chemical Abstracts registry